



### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An AV data wireless communication system comprising:

- an AV data transmitter encrypting an AV data signal including a voice or a picture with a communication key signal, and transmitting the encrypted AV data signal; and
- an AV data receiver decrypting the received AV data signal, wherein

in the case where one of the AV data transmitter and the AV data receiver is defined as a first communication apparatus and the other one is defined as a second communication apparatus,

when the first communication apparatus requests the second communication apparatus to transmit the communication key signal,

the second communication apparatus generates two or more ~~setting-key-code~~ signals based on the communication key signal of the second communication apparatus, and transmits all of the ~~setting-key-code~~ signals to the first communication apparatus using different transfer mediums, respectively, the different transfer mediums being as many as the ~~setting-key-code~~ signals, and

the first communication apparatus decodes the original communication key signal using all of the received ~~setting-key-code~~ signals, and establishes communication with the second communication apparatus.

2. (Original) The AV data wireless communication system according to claim 1, wherein one of the transfer mediums is a transfer medium used when the AV data signal is transmitted and received.

3. (Currently Amended) The AV data wireless communication system according to claim 1, further comprising:

an electronic device that mediates one of the transfer mediums, wherein

after the second communication apparatus transmits one of the ~~setting-key-code~~ signals to the electronic device and the electronic device stores the transmitted ~~setting-key-code~~ signal, the electronic device transmits the ~~setting-key-code~~ signal to the first communication apparatus.

4. (Currently Amended) An AV data wireless communication system comprising:  
an AV data transmitter encrypting an AV data signal including a voice or a picture with a communication key signal, and transmitting the encrypted AV data signal; and  
an AV data receiver decrypting the received AV data signal, wherein  
in the case where one of the AV data transmitter and the AV data receiver is defined as a first communication apparatus and the other one is defined as a second communication apparatus,

when the first communication apparatus requests the second communication apparatus to transmit the communication key signal,

the second communication apparatus generates a first ~~setting-key-code~~ signal and a second ~~setting-key-code~~ signal based on the communication key signal of the second communication apparatus, transmits the first ~~code-key~~ signal to the first communication apparatus using a first transfer medium, and transmits the second ~~setting-key-code~~ signal to the first communication apparatus using a second transfer medium, and

the first communication apparatus decodes the original communication key signal using the received first and second ~~setting-key-code~~ signals, stores the communication key signal, and establishes communication with the second communication apparatus.

5. (Currently Amended) The AV data wireless communication system according to claim 4, wherein

in the second communication apparatus, the first ~~setting-key-code~~ signal and the second ~~setting-key-code~~ signal each vary according to timings at which the first and second ~~setting-key-code~~ signals are generated.

6. (Currently Amended) The AV data wireless communication system according to claim 5, wherein

time information is synchronized between the first communication apparatus and the second communication apparatus, and

the second communication apparatus generates the first setting-key-code signal and the second setting-key-code signal, ~~which vary every time the first and second setting key signals are generated,~~ using the time information, and thereby generating first and second code signals which vary each time the code signals are generated upon generation of the first setting key signal and the second setting key signal.

7. (Currently Amended) The AV data wireless communication system according to claim 6, wherein

when the first communication apparatus decodes the communication key signal based on the first setting-key-code signal and the second setting-key-code signal, the first communication apparatus decodes the communication key signal using the time information.

8. (Currently Amended) The AV data wireless communication system according to claim 7, wherein

when the first communication apparatus decodes the communication key signal based on the first setting-key-code signal and the second setting-key-code signal, the first communication apparatus ~~uses the time information while changing~~ changes the time information by ~~as much as~~ a predetermined time then decodes the communication key signal using the time information.

9. (Currently Amended) The AV data wireless communication system according to claim 4, wherein

at least one of the first setting-key-code signal and the second setting-key-code signal is transmitted from the second communication apparatus to the first communication apparatus in a specific period.

10. (Currently Amended) The AV data wireless communication system according to claim 4, wherein

when the first communication apparatus receives the first ~~setting key code~~ signal, the first communication apparatus requests the second communication apparatus to transmit the second ~~setting key code~~ signal.

11. (Currently Amended) The AV data wireless communication system according to claim 10, wherein

the second communication apparatus transmits the second ~~setting key code~~ signal for a certain period after the first communication apparatus requests the second communication apparatus to transmit the second ~~setting key code~~ signal.

12. (Currently Amended) The AV data wireless communication system according to claim 4, wherein

when the second communication apparatus receives a changeover completion signal indicating that the communication key signal is generated and stored, from the first communication apparatus, the second communication apparatus finishes transmitting the second ~~setting key code~~ signal.

13. (Original) The AV data wireless communication system according to claim 4, wherein

at least one of the first communication apparatus and the second communication apparatus has a communication apparatus authentication code for authenticating the other communication apparatus.

14. (Original) The AV data wireless communication system according to claim 4, wherein

at least one of the first communication apparatus and the second communication apparatus has a communication apparatus authentication code based on which the at least one of

the first communication apparatus and the second communication apparatus is authenticated by the other communication apparatus.

15. (Original) The AV data wireless communication system according to claim 4, wherein

the second communication apparatus has a communication apparatus authentication code for authenticating the first communication apparatus, and

when the second communication apparatus has transmitted the communication apparatus authentication code to the first communication apparatus through the first transfer medium,

the first communication apparatus determines that the transmitted code is the communication apparatus authentication code, and transmits the communication apparatus authentication code to the second communication apparatus, and

the second communication apparatus receives the communication apparatus authentication code transmitted from the first communication apparatus, and authenticates the first communication apparatus based on the received communication apparatus authentication code and the communication apparatus authentication code stored in the second communication apparatus.

16. (Original) The AV data wireless communication system according to claim 4, wherein

one of the first transfer medium and the second transfer medium is a transfer medium used when the AV data is transmitted and received.

17. (Currently Amended) The AV data wireless communication system according to claim 4, wherein

one of the first transfer medium and the second transfer medium is a transfer medium that ~~mediates~~ is mediated by an electronic device, and

one of the first ~~setting key code~~ signal and the second ~~setting key code~~ signal is transmitted from the second communication apparatus to the electronic device, stored in the

electronic device, and transmitted from the electronic device to the first communication apparatus.

18. (Currently Amended) The AV data wireless communication system according to claim 17, wherein

after transmitting the ~~setting key code~~ signal that is one of the first ~~setting key code~~ signal and the second ~~setting key code~~ signal to the first communication apparatus, the electronic device deletes the ~~setting key code~~ signal stored in the electronic device.

19. (Currently Amended) The AV data wireless communication system according to claim 18, wherein

when the electronic device receives a changeover completion signal indicating that the communication key signal is generated and stored, from the first communication apparatus, the electronic device deletes the ~~setting key code~~ signal stored in the electronic device.

20. (Original) The AV data wireless communication system according to claim 17, wherein

the electronic device has an electronic device authentication code based on which at least one of the first communication apparatus and the second communication apparatus authenticates the electronic device.

21. (Currently Amended) The AV data wireless communication system according to claim 20, wherein

when the electronic device has transmitted the electronic device authentication code to the second communication apparatus and the second communication apparatus has authenticated the electronic device based on the electronic device authentication code, the second communication apparatus transmits the ~~setting key code~~ signal to the electronic device.

22. (Currently Amended) The AV data wireless communication system according to claim 20, wherein

when the electronic device has transmitted the electronic device authentication code to the first communication apparatus and the first communication apparatus has authenticated the electronic device based on the electronic device authentication code, the first communication apparatus receives the ~~setting key code~~ signal from the electronic device.

23. (Original) The AV data wireless communication system according to claim 17, wherein

the second communication apparatus has a communication apparatus authentication code for authenticating the first communication apparatus, and

when the communication apparatus authentication code has been transmitted from the second communication apparatus to the electronic device and stored in the electronic device,

the electronic device transmits the communication apparatus authentication code to the first communication apparatus, and the first communication apparatus determines that the transmitted code is the communication apparatus authentication code and transmits the communication apparatus authentication code to the second communication apparatus, and

the second communication apparatus receives the communication apparatus authentication code transmitted from the first communication apparatus and authenticates the first communication apparatus based on the received communication apparatus authentication code and the communication apparatus authentication code stored in the second communication apparatus.

24. (Original) The AV data wireless communication system according to claim 17, wherein

the first communication apparatus and the second communication apparatus have a first communication apparatus authentication code and a second communication apparatus authentication code for authentication, respectively, and

when the second communication apparatus authentication code has been transmitted from the second communication apparatus to the electronic device and stored in the electronic device, the first communication apparatus transmits the first communication apparatus authentication code to the electronic device, and the electronic device authenticates the first communication apparatus based on the received first communication apparatus authentication data and the stored second communication apparatus authentication code.

25. (Original) The AV data wireless communication system according to claim 17, wherein:

the first communication apparatus and the second communication apparatus comprise a connection state notification unit notifying that the first communication apparatus and the second communication apparatus are communicable with the electronic device.

26. (Original) The AV data wireless communication system according to claim 25, wherein

when it is determined by the connection state notification unit that the first communication apparatus and the second communication apparatus are communicable with the electronic device, the electronic device is notified that the first communication apparatus and the second communication apparatus are communicable with the electronic device.

27. (Original) The AV data wireless communication system according to claim 26, wherein

the electronic device is a remote controller that holds optical communication with the first communication apparatus and the second communication apparatus,

each of the first communication apparatus and the second communication apparatus includes:

a first light reception/emission unit dedicated to the electronic device; and



a second light reception/emission unit for holding optical communication with a remote controller other than the electronic device that operates the first communication apparatus and the second communication apparatus, and

when it is determined by the connection state notification unit that the first communication apparatus and the second communication apparatus are communicable with the electronic device, the first light reception/emission unit performs a light emission operation to thereby notify the electronic device that the first communication apparatus and the second communication apparatus are communicable with the electronic device.

28. (Original) The AV data wireless communication system according to claim 27, wherein

each of the first communication apparatus and the second communication apparatus includes a cap that covers the first light reception/emission unit, the first light reception/emission unit being provided within each of the first communication apparatus and the second communication apparatus, and

when the cap is opened to insert the electronic device and the electronic device faces the first light reception/emission unit, it is determined by the connection state notification unit that the communication apparatus is communicable with the electronic device.

29. (Original) The AV data wireless communication system according to claim 17, wherein

the electronic device holds wired communication with the first communication apparatus and the second communication apparatus.

30. (Original) The AV data wireless communication system according to claim 17, wherein

the electronic device holds wireless communication with the first communication apparatus and the second communication apparatus.

31. (Original) The AV data wireless communication system according to claim 30, wherein

the electronic device is a remote controller that transmits an operation signal for operating at least one of the first communication apparatus and the second communication apparatus.

32. (Currently Amended) A communication apparatus comprising:

a first interface connected to a first transfer medium through which an AV data signal including a voice or a picture is transmitted and received;

a second interface connected to a second transfer medium other than the first transfer medium;

a cipher key storage unit storing a communication key signal for encrypting or decrypting the AV data signal; and

a cipher key changeover control unit generating the communication cipher key by performing a specific arithmetic operation, and storing the communication cipher key in the cipher key storage unit, wherein

when the communication apparatus requests the communication key signal of ~~a~~an other communication apparatus ~~other than the communication apparatus~~ so as to communicate and connect with the other communication apparatus,

the communication apparatus receives a first ~~setting key code~~ signal and a second ~~setting key code~~ signal generated by the other communication apparatus based on the communication key signal at the first interface and the second interface through the first transfer medium and the second transfer medium, respectively, and

the cipher key changeover control unit performs the specific arithmetic operation using the received first and second ~~setting key code~~ signals, thereby decoding the communication key signal and storing the decoded communication key signal in the cipher key storage unit.

33. (Currently Amended) The communication apparatus according to claim 32, wherein

when the communication key signal is decoded based on the first ~~setting key code~~ signal and the second ~~setting key code~~ signal, time information is utilized while changing the time information by as much as a predetermined time.

34. (Currently Amended) The communication apparatus according to claim 32, wherein the communication apparatus receives at least one of the first ~~setting key code~~ signal and the second ~~setting key code~~ signal in a specific period.

35. (Currently Amended) The communication apparatus according to claim 32, wherein when receiving the first ~~setting key code~~ signal, the communication apparatus requests the other communication apparatus to transmit the second ~~setting key code~~ signal.

36. (Original) The communication apparatus according to claim 32, wherein the communication apparatus has a communication apparatus authentication code for authenticating the other communication apparatus.

37. (Original) The communication apparatus according to claim 32, wherein the communication apparatus has a communication apparatus authentication code based on which the other communication apparatus authenticates the communication apparatus.

38. (Currently Amended) The communication apparatus according to claim 32, wherein the second transfer medium is a transfer medium that ~~mediates~~ is mediated by an electronic device, and

the second ~~setting key code~~ signal transmitted from the other communication apparatus to the electronic device and stored in the electronic device is transmitted from the electronic device and received by the communication apparatus through the second interface.

39. (Original) The communication apparatus according to claim 38, wherein

the communication apparatus has an electronic device authentication code based on which the electronic device is authenticated.

40. (Currently Amended) The communication apparatus according to claim 39, wherein after authenticating the electronic device based on the electronic device authentication code transmitted from the electronic device, the communication apparatus receives the ~~setting~~ key\_code signal from the electronic device.

41. (Original) The communication apparatus according to claim 38, further comprising: a connection state notification unit notifying that the communication apparatus is communicable with the electronic device.

42. (Original) The communication apparatus according to claim 41, wherein when determining by the connection state notification unit that the communication apparatus is communicable with the electronic device, the communication apparatus is notifies the electronic device that the communication apparatus is communicable with the electronic device.

43. (Original) The communication apparatus according to claim 42, further comprising: a first light reception/emission unit for holding optical communication with the electronic device; and

a second light reception/emission unit for holding optical communication with a remote controller other than the electronic device, wherein

when it is determined by the connection state notification unit that the communication apparatus is communicable with the electronic device, the first light reception/emission unit performs a light emission operation to thereby notify the electronic device that the communication apparatus is communicable with the electronic device.

44. (Original) The communication apparatus according to claim 43, further comprising:

a cap that covers the first light reception/emission unit, the first light reception/emission unit being provided within the communication apparatus, wherein

when the cap is opened to insert the electronic device and the electronic device faces the first light reception/emission unit, it is determined by the connection state notification unit that the communication apparatus is communicable with the electronic device.

45. (Currently Amended) A communication apparatus comprising:

a first interface connected to a first transfer medium through which an AV data signal including a voice or a picture is transmitted and received;

a second interface connected to a second transfer medium other than the first transfer medium;

a cipher key storage unit storing a communication key signal for encrypting or decrypting the AV data signal; and

a ~~setting key code~~ signal generation unit which reads out the communication key signal stored in the cipher key storage unit, which performs a specific arithmetic processing, and which generates a first ~~setting key code~~ signal and a second ~~setting key code~~ signal when determining that the communication cipher key signal is requested, wherein

the first ~~setting key code~~ signal and the second ~~setting key code~~ signal generated by the ~~setting key code~~ signal generation unit are outputted to the first transfer medium and the second transfer medium through the first interface and the second interface, respectively.

46. (Currently Amended) The communication apparatus according to claim 45, wherein

the first ~~setting key code~~ signal and the second ~~setting key code~~ signal each vary according to timings at which the first ~~setting key code~~ signal and the second ~~setting key code~~ signal are generated.

47. (Currently Amended) The communication apparatus according to claim 46, wherein

~~when the first setting key code signal and the second setting key code signal are generated;~~ using time information on obtained upon generation of the first setting key code

signal and the second ~~setting-key-code~~ signal, ~~is used to thereby generate-generating~~ the first ~~setting-key-code~~ signal and the second ~~setting-key-code~~ signal which vary every each time the first ~~setting-key-code~~ signal and the second ~~setting-key-code~~ signal are generated.

48. (Currently Amended) The communication apparatus according to claim 45, wherein at least one of the first ~~setting-key-code~~ signal and the second ~~setting-key-code~~ signal is transmitted in a specific period.

49. (Original) The communication apparatus according to claim 45, wherein when transmission of the second ~~setting-key-code~~ signal is requested after a communication apparatus other than the communication apparatus receives the ~~first-first~~ ~~setting-key-code~~ signal, the communication apparatus transmits the second ~~setting-key-code~~ signal for a certain period.

50. (Currently Amended) The communication apparatus according to claim 45, wherein when receiving a changeover completion signal indicating that the communication key signal is generated and stored, from a communication apparatus other than the communication apparatus, the communication apparatus finishes transmitting the second ~~setting-key-code~~ signal.

51. (Original) The communication apparatus according to claim 45, wherein the communication apparatus has a communication apparatus authentication code for authenticating a communication apparatus other than the communication apparatus.

52. (Original) The communication apparatus according to claim 45, wherein the communication apparatus has a communication apparatus authentication code based on which a communication apparatus other than the communication apparatus authenticates the communication apparatus.

53. (Currently Amended) The communication apparatus according to claim 45, wherein

the second transfer medium is a transfer medium that ~~mediates~~ is mediated by an electronic device, and

the communication apparatus medium transmits the second ~~setting key code~~ signal to the electronic device.

54. (Original) The communication apparatus according to claim 53, wherein the communication apparatus has an electronic device authentication code based on which the electronic device is authenticated.

55. (Currently Amended) The communication apparatus according to claim 54, wherein after authenticating the electronic device based on the electronic device authentication code transmitted from the electronic device, the communication apparatus transmits the ~~setting key code~~ signal to the electronic device.

56. (Original) The communication apparatus according to claim 53, further comprising: a connection state notification unit notifying that the communication apparatus is communicable with the electronic device.

57. (Original) The communication apparatus according to claim 56, wherein when determining by the connection state notification unit that the communication apparatus is communicable with the electronic device, the communication apparatus notifies the electronic device that the communication apparatus is communicable with the electronic device.

58. (Original) The communication apparatus according to claim 57, further comprising: a first light reception/emission unit for holding optical communication with the electronic device; and

a second light reception/emission unit for holding optical communication with a remote controller other than the electronic device, wherein

when it is determined by the connection state notification unit that the communication apparatus is communicable with the electronic device, the first light reception/emission unit performs a light emission operation to thereby notify the electronic device that the communication apparatus is communicable with the electronic device.

59. (Original) The communication apparatus according to claim 58, further comprising:  
a cap that covers the first light reception/emission unit, the first light reception/emission unit being provided within the communication apparatus, wherein

when the cap is opened to insert the electronic device and the electronic device faces the first light reception/emission unit, it is determined by the connection state notification unit that the communication apparatus is communicable with the electronic device.

60. (Currently Amended) An electronic device comprising:  
an interface connected to a second transfer medium other than a first transfer medium, so as to communicate with a communication terminal that transmits and receives an AV data signal using the first transfer medium; and

a ~~setting key code~~ signal storage unit that stores a second ~~setting key code~~ signal generated based on a communication key signal so as to encrypt or decrypt the AV data signal, wherein

the electronic device is employed in the AV data wireless communication system according to claim 17, and

after receiving the second ~~setting key code~~ signal transmitted from the second communication apparatus through the interface and storing the second ~~setting key code~~ signal in the ~~setting key code~~ signal storage unit, the electronic device transmits the second ~~setting key code~~ signal stored in the ~~setting key code~~ signal storage unit to the first communication apparatus through the interface.

61. (Currently Amended) The electronic device according to claim 60, wherein



after transmitting the second ~~setting key code~~ signal to the first communication apparatus, the electronic device deletes the second ~~setting key code~~ signal stored in the ~~setting key code~~ signal storage unit.

62. (Currently Amended) The electronic device according to claim 61, wherein when receiving a changeover completion signal indicating that the communication key signal is generated and stored, from the first communication apparatus, the electronic device deletes the second ~~setting key code~~ signal stored in the ~~setting key code~~ signal storage unit.

63. (Original) The electronic device according to claim 60, wherein the electronic device has an electronic device authentication code based on which at least one of the first communication apparatus and the second communication apparatus authenticates the electronic device.

64. (Original) The electronic device according to claim 60, wherein the electronic device holds wired communication with the first communication apparatus and the second communication apparatus.

65. (Original) The electronic device according to claim 60, wherein the electronic device holds wireless communication with the first communication apparatus and the second communication apparatus.

66. (Original) The electronic device according to claim 65, wherein the electronic device is a remote controller that transmits an operation signal for operating at least one of the first communication apparatus and the second communication apparatus.